

# CUMULATIVE INDEX

## VOLUMES 46-55 (1971-1980)

[See Volume 35 (4), 1960 and Volume 45 (4), 1970 for indexes to earlier volumes.]  
*Review articles and Commentaries only are indexed; for book reviews, see annual indexes.*

### A

- Achlorophyllous angiosperms (mycotrophic), phylogeny and ecology of (T. E. Furman and J. M. Trappe), 46: 219-225
- Action of L-canavanine, a structural analogue of L-arginine (G. A. Rosenthal), 52: 155-178
- Aspects of Biological Exploitation (M. L. Rosenzweig), 52: 371-380
- Adaptation and Evolution of Early Fishes (K. S. Thomson), 46: 139-166
- Adaptations (cursorial) in dinosaurs, theoretical aspects of (W. P. Coombs, Jr.), 53: 393-418
- Adaptive significance and evolution of post-natal growth rates in the terrestrial vertebrates (T. J. Case), 53: 243-282
- Adaptiveness of Social Wasp Nest Architecture (R. L. Jeanne), 50: 267-287
- Aggression (human), resource competition and (W. H. Durham), 51: 385-415
- Aging (mammalian), regulation of physiological changes during (C. E. Finch), 51: 49-83
- Altruism (reciprocal), kin selection, and the principle of maximization — a reply to Sahlins (S. R. Schulman) [Commentary], 53: 283-286
- Altruism (reciprocal), the evolution of (R. L. Trivers), 46: 35-57
- Ambition in Two Cultures (J. H. Gagnon) [Commentary], 46: 58-65
- Anderson, J. F., H. Rahn, and H. D. Prange, Scaling of Supportive Tissue Mass, 54: 139-148
- Anderson, S., Patterns of Faunal Evolution, 49: 311-332
- Angiosperms (mycotrophic achlorophyllous), phylogeny and ecology of (T. E. Furman and J. M. Trappe), 46: 219-225
- Animal genome, organization, transcription and regulation in (E. H. Davidson and R. J. Britten), 48: 565-613
- Anniversary Message (Editors), 51: 1
- Antibody production, cellular basis of (M. Feldmann and G. J. V. Nossal), 47: 269-302

- Approach (systems-analytical) to macro-evolutionary phenomena (R. Riedl), 52: 351-370
- Arborescent monocotyledons, transport problems in (M. H. Zimmermann), 48: 314-321
- Archaeopteryx* and the Origin of Flight (J. H. Ostrom), 49: 27-47
- Architecture (nest), adaptiveness of, in social wasps (R. L. Jeanne), 50: 267-287
- Archival Files: An Inquiry, 54: 383
- Arginine (L), biological effects and mode of action of L-canavanine, a structural analogue of (G. A. Rosenthal), 52: 155-178
- Arid-zone kangaroos of Australia, an ecological comparison in relation to introduction of ruminants (A. E. Newsome), 50: 389-424
- Aspects (theoretical) of cursorial adaptations in dinosaurs (W. P. Coombs, Jr.), 53: 393-418
- Assembly of subcellular structure, bacteriophage T4 morphogenesis as a model for (W. B. Wood), 55: 353-367
- Assembly of virus shell, scaffolding proteins and the genetic control of (J. King, R. Griffin-Shea, and M. T. Fuller), 55: 369-393
- Assimilation of carbon dioxide in monocotyledons, pathways of carbon metabolism related to (C. C. Black, W. H. Campbell, T. M. Chen, and P. Dittrich), 48: 299-313
- Astaurov, Boris L., the life and research of (R. L. Berg), 54: 397-416
- Athwal, D. S., Semidwarf Rice and Wheat in Global Food Needs, 46: 1-34
- Australia, an ecological comparison of the two arid-zone kangaroos of, in relation to introduction of ruminants (A. E. Newsome), 50: 389-424

### B

- Basis (cellular) of antibody production (M. Feldmann and G. J. V. Nossal), 47: 269-302
- Bacterial flagella, building (M. Silverman), 55: 395-408

- Bacteriophage T4 Morphogenesis as a Model for Assembly of Subcellular Structure (W. B. Wood), 55: 353-367
- Balance of nature, changing concepts of (F. N. Egerton), 48: 322-350
- Barrow, M. V., C. F. Simpson, and E. J. Miller, Lathyrism: A Review, 49: 101-128
- Behavior in Polychaetes (S. M. Evans), 46: 379-405
- Behavior patterns (copulatory) in male mammals (D. A. Dewsbury), 47: 1-33
- Behavior (social), evolution by kin selection (M. J. West Eberhard), 50: 1-34
- Behavior, socially facilitated (D. A. Clayton), 53: 373-392
- Bekoff, M., The Development of Social Interaction, Play, and Metacommunication in Mammals: An Ethological Perspective, 47: 412-434
- Benefits of lizard thermoregulation, costs and (R. B. Huey and M. Slatkin), 51: 363-384
- Benzing, D. H., Mineral Nutrition and Related Phenomena in Bromeliaceae and Orchidaceae, 48: 277-290
- Berg, R. L., The Life and Research of Boris L. Astaurov, 54: 397-416
- Biochemistry, unity and diversity in (M. Levandowsky) [Commentary], 54: 55-60
- Biological and cultural evolution, uncertainty in interplay of (H. F. Blum), 53: 29-40
- Biological Effects and Mode of Action of L-Canavanine, a Structural Analogue of L-Arginine (G. A. Rosenthal), 52: 155-178
- Biological exploitation, aspects of (M. L. Rosenzweig), 52: 371-380
- Biology (comparative evolutionary) of the sibling species, *Drosophila melanogaster* and *D. simulans* (P. A. Parsons), 50: 151-169
- Biology (general) and special embryology, reflections on fifty years of publications on the history of (J. M. Oppenheimer), 50: 373-387
- Biology, milestones and rates of growth in the development of (B. Glass), 54: 31-53
- Birth of a new journal of plant physiology, reflections on (F. C. Steward) [Commentary], 50: 289-291
- Black, C. C., W. H. Campbell, T. M. Chen, and P. Dittrich, Pathways of Carbon Metabolism Related to Net Carbon Dioxide Assimilation by Monocotyledons, 48: 299-313
- Blum, H. F., Uncertainty in Interplay of Biological and Cultural Evolution: Man's View of Himself, 53: 29-40
- Blumer, L. S., Male Parental Care in the Bony Fishes, 54: 149-161
- Bony fishes, male parental care in (L. S. Blumer), 54: 149-161
- Boris L. Astaurov, the life and research of (R. L. Berg), 54: 397-416
- Branching in Monocotyledons (P. B. Tomlinson), 48: 458-466
- Britten, R. J. (with E. H. Davidson), Organization, Transcription and Regulation in the Animal Genome, 48: 565-613
- Britten, R. J., and E. H. Davidson, Repetitive and Non-repetitive DNA Sequences and a Speculation on the Origins of Evolutionary Novelty, 46: 111-138
- Bromeliaceae and Orchidaceae, mineral nutrition and related phenomena in (D. H. Benzing), 48: 277-290
- Bronson, F. H., The Reproductive Ecology of the House Mouse, 54: 265-299
- Building Bacterial Flagella (M. Silverman), 55: 395-408
- Bull, J. J., Sex Determination in Reptiles, 55: 3-21

## C

- Cabanac, M., Sensory Pleasure, 54: 1-29
- Campbell, W. H. (with T. M. Chen, P. Dittrich, and C. C. Black), Pathways of Carbon Metabolism Related to Net Carbon Dioxide Assimilation by Monocotyledons, 48: 299-313
- Canavanine (L), a structural analogue of L-arginine, biological effects and mode of action of (G. A. Rosenthal), 52: 155-178
- Cancer Invasion and Metastasis (I. R. Hart and I. J. Fidler), 55: 121-142
- Carbon dioxide assimilation by monocotyledons, metabolic pathways related to (C. C. Black, W. H. Campbell, T. M. Chen, and P. Dittrich), 48: 299-313
- Carbon metabolism pathways related to net carbon dioxide assimilation by monocotyledons (C. C. Black, W. H. Campbell, T. M. Chen, and P. Dittrich), 48: 299-313
- Carcinogenesis (environmental), an integrative model of (J. E. Trosko and C.-C. Chang), 53: 115-141

- Care (male parental) in the bony fishes (L. S. Blumer), 54: 149-161
- Case, T. J., On the Evolution and Adaptive Significance of Postnatal Growth Rates in the Terrestrial Vertebrates, 53: 243-282
- Castrators (parasitic), similarity to parasitoids (A. M. Kuris), 49: 129-148
- Cell interactions, a molecular model for (S. Roth), 48: 541-563
- Cell Recognition in Flowering Plants (A. E. Clarke and R. B. Knox), 53: 3-28
- Cellular Basis of Antibody Production (M. Feldmann and G. J. V. Nossal), 47: 269-302
- Chang, C.-C. (with J. E. Trosko), Environmental Carcinogenesis: An Integrative Model, 53: 115-141
- Changes (physiological) during mammalian aging, regulation of (C. E. Finch), 51: 49-83
- Changing Concepts of the Balance of Nature (F. N. Egerton), 48: 322-350
- Charnov, E. L. (with G. H. Pyke and H. R. Pulliam), Optimal Foraging: A Selective Review of Theory and Tests, 52: 137-154
- Chen, T. M. (with P. Dittrich, C. C. Black, and W. H. Campbell), Pathways of Carbon Metabolism Related to Net Carbon Dioxide Assimilation by Monocotyledons, 48: 299-313
- Chlorophyll synthesis and fine structure, development of (J. Rosinski and W. G. Rosen), 47: 160-191
- Chloroplast Development: Fine Structure and Chlorophyll Synthesis (J. Rosinski and W. G. Rosen), 47: 160-191
- Chromosomes and genes, folding of (B. A. Hamkalo and J. B. Rattner), 55: 409-417
- Circannual rhythms of food consumption in marmots and ground squirrels, hibernation and (D. E. Davis), 51: 477-514
- Cladoceran life histories, evolution of (M. Lynch), 55: 23-42
- Clarke, A. E., and R. B. Knox, Cell Recognition in Flowering Plants, 53: 3-28
- Clayton, D. A. Socially Facilitated Behavior, 53: 373-392
- Cloud, P., M. Moorman, and D. Pierce, Sporulation and Ultrastructure in a Late Proterozoic Cyanophyte: Some Implications for Taxonomy and Plant Phylogeny, 50: 131-150
- Coevolution, models of (M. Slatkin and J. Maynard Smith), 54: 233-263
- Coevolution of the Rust Fungi and Their Hosts (D. B. O. Savile), 46: 211-218
- Cohen, J. E., Heterologous Immunity in Human Malaria, 48: 467-489
- Colbert, E. H., Tetrapods and Continents, 46: 250-269
- Commentary: Ambition in Two Cultures (J. H. Gagnon), 46: 58-65
- Commentary: Doomsday Revisited (J. Woodcock), 50: 425-428
- Commentary: Genetics, Intelligence, and Society (J. R. G. Turner and B. Glass), 51: 85-88
- Commentary: Group Selection (J. Maynard Smith), 51: 277-283
- Commentary: Kin Selection, Reciprocal Altruism, and the Principle of Maximization — A Reply to Sahlin (S. R. Schulman), 53: 283-286
- Commentary: Mendel's Elder Friar and Teacher, Matthew Kläcel (1808-1882) (V. Orel), 47: 435-436
- Commentary: On Scientific Progress and Its Limits (B. Glass), 54: 417-419
- Commentary: Reflections on the Birth of a New Journal of Plant Physiology (F. C. Steward), 50: 289-291
- Commentary: Subjective Science — Skinner and Dubos on Survival (J. A. Woodcock), 48: 615-623
- Commentary: The Compleat Dictionary of Zoology, I, Vernacular Words in Herpetology (R. B. Huey), 54: 301-307
- Commentary: Unity and Diversity in Biochemistry (M. Levandowsky), 54: 55-60
- Commentary: Wilson's Ostrich Egg and Morgan's Omelet (A. Weinstein), 55: 43-55
- Comparative Evolutionary Biology of the Sibling Species, *Drosophila melanogaster* and *D. simulans* (P. A. Parsons), 50: 151-169
- Comparison (ecological) of the two arid-zone kangaroos of Australia and their anomalous prosperity since the introduction of ruminant stock to their environment (A. E. Newsome), 50: 389-424
- Competition among intracellular organelles, evolutionary consequences of (W. G. Eberhard), 55: 231-249
- Competition (resource) and human aggression (W. H. Durham), 51: 385-415
- Compleat Dictionary of Zoology, I, Vernacular

- Words in Herpetology (R. B. Huey) [Commentary], 54: 301-307
- Complexity of *Hydra*: Homeostasis, Morphogenesis, Controls, and Integration (S. Shostak), 49: 287-310
- Concepts of the balance of nature (F. N. Eger-ton), 48: 322-350
- Concerning the New Copyright Law, 53: 1-2
- Consequences (evolutionary) of intracellular organelle competition (W. G. Eberhard), 55: 231-249
- Continental Drift and the Evolution of the Mammals on Southern Continents (A. Keast), 46: 335-378
- Continents, tetrapods and (E. H. Colbert), 46: 250-269
- Continents (southern), continental drift, and evolution of mammals (A. Keast): 46: 335-378
- Control (genetic) of virus shell assembly, scaffolding proteins and (J. King, R. Griffin-Shea, and M. T. Fuller), 55: 369-393
- Control of Growth and Development in the Monocotyledons — New Areas of Experimental Research (J. B. Fisher), 48: 291-298
- Controls in *Hydra* (S. Shostak), 49: 287-310
- Controversy, dance-language (J. L. Gould), 51: 211-244
- Coombs, W. P., Jr., Theoretical Aspects of Cursorial Adaptations in Dinosaurs, 53: 393-418
- Copulatory behavior in male mammals, patterns of (D. A. Dewsbury), 47: 1-33
- Corrigenda (errata), 54: 232; 55: 1; 55: 229
- Costs and Benefits of Lizard Thermoregulation (R. B. Huey and M. Slatkin), 51: 363-384
- Critical Review of the Models of Group Selection (M. J. Wade), 53: 101-114
- Cultural and biological evolution, uncertainty in interplay of (H. F. Blum), 53: 29-40
- Cursorial adaptations in dinosaurs, theoretical aspects of (W. P. Coombs, Jr.), 53: 393-418
- Cyanophyte (Late Proterozoic), sporulation and ultrastructure in (P. Cloud, M. Moorman, and D. Pierce), 50: 131-150
- D
- Dance-Language Controversy (J. L. Gould), 51: 211-244
- Davidson, E. H., and R. J. Britten, Organization, Transcription and Regulation in the Animal Genome, 48: 565-613
- Davidson, E. H. (with R. J. Britten), Repetitive and Non-repetitive DNA Sequences and a Speculation on the Origins of Evolutionary Novelty, 46: 111-138
- Davis, D. E., Hibernation and Circannual Rhythms of Food Consumption in Marmots and Ground Squirrels, 51: 477-514
- Defense (plant), role of trichomes in (D. A. Levin), 48: 3-15
- Dental formulas and replacement patterns (therian), a theory of the evolution of (A. C. Ziegler), 46: 226-249
- Determination of sex in reptiles (J. J. Bull), 55: 3-21
- Development and growth in the monocotyledons, control of (J. B. Fisher), 48: 291-298
- Development of biology, milestones and rates of growth in (B. Glass), 54: 31-53
- Development of chloroplast fine structure and synthesis (J. Rosinski and W. G. Rosen), 47: 160-191
- Development of Social Interaction, Play, and Metacommunication in Mammals: An Ethological Perspective (M. Bekoff), 47: 412-434
- Dewsbury, D. A. Patterns of Copulatory Behavior in Male Mammals, 47: 1-33
- Dictionary of zoology (I: Vernacular words in herpetology) (R. B. Huey) [Commentary], 54: 301-307
- Dinosaurs, theoretical aspects of cursorial adaptations in (W. P. Coombs, Jr.), 53: 393-418
- Disjunctions (major) in the geographic ranges of seed plants (R. F. Thorne), 47: 365-411
- Diversity in biochemistry, unity and (M. Levandowsky) [Commentary], 54: 55-60
- Diversity-stability relationships in ecology, theory of (D. Goodman), 50: 237-266
- DNA sequences, repetitive and non-repetitive, and a speculation on the origins of evolutionary novelty (R. J. Britten and E. H. Davidson), 46: 111-138
- Doomsday Revisited (J. Woodcock) [Commentary], 50: 425-428
- Doyle, J. A., Fossil Evidence on Early Evolution of the Monocotyledons, 48: 399-413
- Drift (continental) and the evolution of the mammals on southern continents (A. Keast), 46: 335-378
- Drosophila melanogaster* and *D. simulans*, comparative evolutionary biology of (P. A. Parsons), 50: 151-169
- Drosophila simulans* and *D. melanogaster*, com-

- parative evolutionary biology of (P. A. Parsons), 50: 151-169
- Dubos on survival, Skinner and (J. A. Woodcock) [Commentary], 48: 615-623
- Durham, W. H., Resource Competition and Human Aggression, Part I: A Review of Primitive War, 51: 385-415
- E*
- Eberhard, W. G., Evolutionary Consequences of Intracellular Organelle Competition, 55: 231-249
- Ecological Comparison of the Two Arid-Zone Kangaroos of Australia, and Their Anomalous Prosperity since the Introduction of Ruminant Stock to Their Environment (A. E. Newsome), 50: 389-424
- Ecology and phylogeny of mycotrophic achlorophyllous angiosperms (T. E. Furman and J. M. Trappe), 46: 219-225
- Ecology (reproductive) of the house mouse (F. H. Bronson), 54: 265-299
- Ecology, theory of diversity-stability relationships in (D. Goodman), 50: 237-266
- Edwards, R. G., Fertilization of Human Eggs in Vitro: Morals, Ethics and the Law, 49: 3-26
- Effects (biological) and mode of action of L-canavanine, a structural analogue of L-arginine (G. A. Rosenthal), 52: 155-178
- Egerton, F. N., Changing Concepts of the Balance of Nature, 48: 322-350
- Egg, Wilson's ostrich, and Morgan's omelet (A. Weinstein) [Commentary], 55: 43-55
- Eggs (human), fertilization in vitro (R. G. Edwards), 49: 3-26
- Embryology (special) and general biology, reflections on fifty years of publications on the history of (J. M. Oppenheimer), 50: 373-387
- Environmental Carcinogenesis: An Integrative Model (J. E. Trosko and C.-C. Chang), 53: 115-141
- Epithelio-mesenchymal organs, a mechanism for morphogenesis in (G. V. Goldin), 55: 251-265
- Erratum (Corrigenda), 54: 232; 55: 1; 55: 229
- Ethics, fertilization of human eggs in vitro and (R. G. Edwards), 49: 3-26
- Evaluation of Narrow Hybrid Zones in Vertebrates (W. S. Moore), 52: 263-278
- Evans, S. M., Behavior in Polychaetes, 46: 379-405
- Evolution and adaptive significance of postnatal growth rates in the terrestrial vertebrates (T. J. Case), 53: 243-282
- Evolution of Cladoceran Life Histories (M. Lynch), 55: 23-42
- Evolution, biological and cultural, uncertainty in interplay of (H. F. Blum), 53: 29-40
- Evolution (faunal), patterns of (S. Anderson), 49: 311-332
- Evolution in the monocotyledons, the problem of leaf morphology and (D. R. Kaplan), 48: 437-457
- Evolution of early fishes, adaptation and (K. S. Thomson), 46: 139-166
- Evolution of Reciprocal Altruism (R. L. Trivers), 46: 35-57
- Evolution of Social Behavior by Kin Selection (M. J. West Eberhard), 50: 1-34
- Evolution of Social Organization and Life History Patterns among Grouse (R. H. Wiley), 49: 201-227
- Evolution of Sociality in Insects (N. Lin and C. D. Michener), 47: 131-159
- Evolution of the mammals on southern continents, continental drift and (A. Keast), 46: 335-378
- Evolution of the monocotyledons, fossil evidence (J. A. Doyle), 48: 399-413
- Evolution of the monocotyledons, palms and (H. E. Moore, Jr., and N. W. Uhl), 48: 414-436
- Evolution of therian dental formulas and replacement patterns, a theory of (A. C. Ziegler), 46: 226-249
- Evolution, optimal strategy of (L. B. Slobodkin and A. Rapoport), 49: 181-200
- Evolutionary approach to specific immune recognition by lymphocytes (G. W. Warr and J. J. Marchalonis), 53: 225-241
- Evolutionary biology (comparative) of the sibling species, *Drosophila melanogaster* and *D. simulans* (P. A. Parsons), 50: 151-169
- Evolutionary Consequences of Intracellular Organelle Competition (W. G. Eberhard), 55: 231-249
- Evolutionary model of territoriality in ungulates (N. Owen-Smith), 52: 1-38
- Evolutionary novelty, origins of, and repetitive and non-repetitive DNA sequences (R. J. Britten and E. H. Davidson), 46: 111-138

- Evolutionary Origin of Feathers (P. J. Regal), 50: 35-66
- Evolutionary status of the family Pandanaceae and its significance in monocotyledon phylogeny (B. C. Stone), 47: 34-45
- Exploitation (biological), (M. L. Rosenzweig), 52: 371-380
- F**
- Facilitated (socially) behavior (D. A. Clayton), 53: 373-392
- Faunal evolution, patterns of (S. Anderson), 49: 311-332
- Feathers, evolutionary origin of (P. J. Regal), 50: 35-66
- Feldmann, M., and G. J. V. Nossal, Cellular Basis of Antibody Production, 47: 269-302
- Females are larger than males, mammals in which (K. Ralls), 51: 245-276
- Fertilization of Human Eggs in Vitro: Morals, Ethics and the Law (R. G. Edwards), 49: 3-26
- Fidler, I. J. (with I. R. Hart), Cancer Invasion and Metastasis, 55: 121-142
- Fifty Years of Fundulus (J. M. Oppenheimer), 54: 385-395
- Fifty years of publication on the history of general biology and special embryology, reflections on (J. M. Oppenheimer), 50: 373-387
- Files (archival), an inquiry, 54: 383
- Finch, C. E., The Regulation of Physiological Changes during Mammalian Aging, 51: 49-83
- Fine structure and chlorophyll synthesis, development of (J. Rosinski and W. G. Rosen), 47: 160-191
- Fisher, J. B., Control of Growth and Development in the Monocotyledons — New Areas of Experimental Research, 48: 291-298
- Fishes (bony), male parental care in (L. S. Blumer), 54: 149-161
- Fishes (early), adaptation and evolution of (K. S. Thomson), 46: 139-166
- Flagella, building of, in bacteria (M. Silverman), 55: 395-408
- Flight, *Archaeopteryx* and the origin of (J. H. Ostrom), 49: 27-47
- Flowering plants, cell recognition in (A. E. Clarke and R. B. Knox), 53: 3-28
- Folding Up a Transfer RNA Molecule Is Not Simple (C. Guthrie), 55: 335-352
- Folding Up Genes and Chromosomes (B. A. Hamkalo and J. B. Rattner), 55: 409-417
- Food consumption in marmots and ground squirrels, hibernation and circannual rhythms of (D. E. Davis), 51: 477-514
- Food needs (global), semidwarf rice and wheat in (D. S. Athwal), 46: 1-34
- Foraging (optimal), a selective review of theory and tests (G. H. Pyke, H. R. Pulliam, and E. L. Charnov), 52: 137-154
- Formulas (dental) and replacement patterns in therians, a theory of the evolution of (A. C. Ziegler), 46: 226-249
- Fossil Evidence on Early Evolution of the Monocotyledons (J. A. Doyle), 48: 399-413
- From Genes to Organelles (J. King), 55: 329-333
- Fuller, M. T. (with J. King and R. Griffin-Shea), Scaffolding Proteins and the Genetic Control of Virus Shell Assembly, 55: 369-393
- Fundulus, fifty years of (J. M. Oppenheimer), 54: 385-395
- Fungi (rust) and their hosts, coevolution of (D. B. O. Savile), 46: 211-218
- Furman, T. E., and J. M. Trappe, Phylogeny and Ecology of Mycotrophic Achlorophyllous Angiosperms, 46: 219-225
- G**
- Gagnon, J. H., Commentary: Ambition in Two Cultures, 46: 58-65
- General biology and special embryology, reflections on fifty years of publications on the history of (J. M. Oppenheimer), 50: 373-387
- Genes and chromosomes, folding of (B. A. Hamkalo and J. B. Rattner), 55: 409-417
- Genetic Control of Organelle Assembly at the Molecular Level (Parts I-VI), 55: 329-417
- Genetic control of virus shell assembly, scaffolding proteins and (J. King, R. Griffin-Shea, and M. T. Fuller), 55: 369-393
- Genetics, Intelligence, and Society (J. R. G. Turner and B. Glass) [Commentary], 51: 85-88
- Genome (animal), organization, transcription and regulation in (E. H. Davidson and R. J. Britten), 48: 565-613
- Geographic ranges of seed plants, major disjunctions in (R. F. Thorne), 47: 365-411



- Glass, B., Commentary: On Scientific Progress and Its Limits, 54: 417-419
- , Milestones and Rates of Growth in the Development of Biology, 54: 31-53
- (with J. R. B. Turner), Commentary: Genetics, Intelligence, and Society, 51: 85-88
- Global food needs, semidwarf rice and wheat in (D. S. Athwal), 46: 1-34
- Goldin, G. V., Towards a Mechanism for Morphogenesis in Epithelio-mesenchymal Organs, 55: 251-265
- Goodman, D., The Theory of Diversity-Stability Relationships in Ecology, 50: 237-266
- Gould, J. L., The Dance-Language Controversy, 51: 211-244
- Gramineae, Ustilaginales on (L. Watson), 47: 46-62
- Grasses, smuts on (L. Watson), 47: 46-62
- Griffin-Shea, R. (with M. T. Fuller and J. King), Scaffolding Proteins and the Genetic Control of Virus Shell Assembly, 55: 369-393
- Ground squirrels and marmots, hibernation and circannual rhythms of food consumption in (D. E. Davis), 51: 477-514
- Group Selection (J. Maynard Smith) [Commentary], 51: 277-283
- Group selection, a critical review of the models of (M. J. Wade), 53: 101-114
- Grouse, evolution of social organization and life history patterns among (R. H. Wiley), 49: 201-227
- Growth and development in the monocotyledons, control of (J. B. Fisher), 48: 291-298
- Growth rates and milestones in the development of biology (B. Glass), 54: 31-53
- Growth rates (postnatal) in the terrestrial vertebrates, evolution and adaptive significance of (T. J. Case), 53: 243-282
- Guthrie, C., Folding Up a Transfer RNA Molecule Is Not Simple, 55: 335-352

## H

- Hamkalo, B. A., and J. B. Rattner, Folding Up Genes and Chromosomes, 55: 409-417
- Hart, I. R., and I. J. Fidler, Cancer Invasion and Metastasis, 55: 121-142
- Herpetology, vernacular words in (The complete dictionary of zoology, I) (R. B. Huey) [Commentary], 54: 301-307
- Heterologous Immunity in Human Malaria (J. E. Cohen), 48: 467-489
- Hibernation and Circannual Rhythms of Food Consumption in Marmots and Ground Squirrels (D. E. Davis), 51: 477-514
- Hirsch, I., Lysosomes and Mental Retardation, 47: 303-312
- History of general biology and special embryology, reflections on fifty years of publications on (J. M. Oppenheimer), 50: 373-387
- Homeostasis, morphogenesis, controls, and integration (complexity of *Hydra*) (S. Shostak), 49: 287-310
- Host Regulation by Insect Parasitoids (S. B. Vinson and G. F. Iwantsch), 55: 143-165
- House mouse, reproductive ecology of (F. H. Bronson), 54: 265-299
- Huey, R. B., Commentary: The Compleat Dictionary of Zoology, I, Vernacular Words in Herpetology, 54: 301-307
- Huey, R. B., and M. Slatkin, Costs and Benefits of Lizard Thermoregulation, 51: 363-384
- Human aggression, resource competition and (W. H. Durham), 51: 385-415
- Human eggs, fertilization in vitro (R. G. Edwards), 49: 3-26
- Human malaria, heterologous immunity in (J. E. Cohen), 48: 467-489
- Hybrid zones (narrow) in vertebrates, an evaluation of (W. S. Moore), 52: 263-278
- Hydra*, complexity of (homeostasis, morphogenesis, controls, and integration) (S. Shostak), 49: 287-310

## I

- Immunity (heterologous) in human malaria (J. E. Cohen), 48: 467-489
- Immune recognition (specific) by lymphocytes, an evolutionary approach (G. W. Warr and J. J. Marchalonis), 53: 225-241
- In memoriam, Charles William Metz (1889-1975), 50: 371
- In memoriam, Alfred Sherwood Romer (1894-1973), 49: 1
- In memoriam, Benjamin Harrison Willier (1890-1972) 48: 1
- In vitro fertilization of eggs (R. G. Edwards), 49: 3-26
- Incidence of Ustilaginales on the genera of Gramineae, some general implications (L. Watson), 47: 46-62
- Insect parasitoids, host regulation by (S. B. Vinson and G. F. Iwantsch), 55: 143-165

- Insects, evolution of sociality in (N. Lin and C. D. Michener), 47: 131-159
- Integration, in *Hydra* (S. Shostak), 49: 287-310
- Integrative model of environmental carcinogenesis (J. E. Trosko and C.-C. Chang), 53: 115-141
- Intelligence and society, genetics and (J. R. G. Turner and B. Glass) [Commentary], 51: 85-88
- Interaction (social), play, and metacommunication in mammals, development of (M. Bekoff), 47: 412-434
- Interactions (cell), a molecular model for (S. Roth), 48: 541-563
- Interactions (trophic), parasitic castrators and parasitoids (A. M. Kuris), 49: 129-148
- Interplay of biological and cultural evolution, uncertainty in (H. F. Blum), 53: 29-40
- Intracellular organelle competition, evolutionary consequences of (W. G. Eberhard), 55: 231-249
- Introduction: From Genes to Organelles (J. King), 55: 329-333
- Introduction of ruminant stock, relation to the two arid-zone kangaroos in Australia (A. E. Newsome), 50: 389-424
- Invasion (cancer) and metastasis (I. R. Hart and I. J. Fidler), 55: 121-142
- Iwantsch, G. F. (with S. B. Vinson), Host Regulation by Insect Parasitoids, 55: 143-165
- J**
- Jeanne, R. L., The Adaptiveness of Social Wasp Nest Architecture, 50: 267-287
- Journal (new) of plant physiology, reflections on the birth of (F. C. Steward) [Commentary], 50: 289-291
- K**
- Kangaroos (arid-zone) of Australia, an ecological comparison in relation to introduction of ruminants (A. E. Newsome), 50: 389-424
- Kaplan, D. R., The Problem of Leaf Morphology and Evolution in the Monocotyledons, 48: 437-457
- Keast, A., Continental Drift and the Evolution of the Mammals on Southern Continents, 46: 335-378
- Kin selection, evolution of social behavior by (M. J. West Eberhard), 50: 1-34
- Kin Selection, Reciprocal Altruism, and the Principle of Maximization — A Reply to Sahlin (S. R. Schulman) [Commentary], 53: 283-286
- King, J., Introduction: From Genes to Organelles, 55: 329-333
- King, J., R. Griffin-Shea, and M. T. Fuller, Scaffolding Proteins and the Genetic Control of Virus Shell Assembly, 55: 369-393
- Klácel, Matthew (1808-1881), Mendel's elder friar and teacher (V. Orel), [Commentary], 47: 435-436
- Kleiman, D. G., Monogamy in Mammals, 52: 39-69
- Knox, R. B. (with A. E. Clarke), Cell Recognition in Flowering Plants, 53: 3-28
- Kuris, A. M., Trophic Interactions: Similarity of Parasitic Castrators to Parasitoids, 49: 129-148
- L**
- L-arginine, biological effects and mode of action of L-canavanine, a structural analogue of (G. A. Rosenthal), 52: 155-178
- L-canavanine, a structural analogue of L-arginine, biological effects and mode of action of (G. A. Rosenthal), 52: 155-178
- Late Proterozoic cyanophyte, sporulation and ultrastructure in (P. Cloud, M. Moorman, and D. Pierce), 50: 131-150
- Lathyrism: A Review (M. V. Barrow, C. F. Simpson, and E. J. Miller), 49: 101-128
- Law, fertilization of human eggs in vitro, morals, ethics and (R. G. Edwards), 49: 3-26
- Leaf morphology and evolution in the monocotyledons (D. R. Kaplan), 48: 437-457
- Levin, D. A., The Role of Trichomes in Plant Defense, 48: 3-15
- Levandowsky, M., Commentary: Unity and Diversity in Biochemistry, 54: 55-60
- Life and Research of Boris L. Astaurov (R. L. Berg), 54: 397-416
- Life history patterns among grouse, evolution of social organization and (R. H. Wiley), 49: 201-227
- Life-History Tactics: A Review of the Ideas (S. C. Stearns), 51: 3-47
- Life histories (cladoceran), evolution of (M. Lynch), 55: 23-42



- Limits on scientific progress (B. Glass) [Commentary], 54: 417-419
- Lin, N., and C. D. Michener, Evolution of Sociality in Insects, 47: 131-159
- Living Systems, Part I (The Nature of Living Systems) (J. G. Miller), 48: 63-91
- Living Systems, Part II (The Organism) (J. G. Miller), 48: 92-276
- Lizard thermoregulation, costs and benefits of (R. B. Huey and M. Slatkin), 51: 363-384
- Lymphocytes, specific immune recognition by (G. W. Warr and J. J. Marchalonis), 53: 225-241
- Lynch, M., The Evolution of Cladoceran Life Histories, 55: 23-42
- Lysosomes and Mental Retardation (I. Hirsch), 47: 303-312
- M**
- Macro-evolutionary phenomena, a systems-analytical approach to (R. Riedl), 52: 351-370
- Major Disjunctions in the Geographic Ranges of Seed Plants (R. F. Thorne), 47: 365-411
- Malaria (human), heterologous immunity in (J. E. Cohen), 48: 467-489
- Male mammals, patterns of copulatory behavior in (D. A. Dewsbury), 47: 1-33
- Male Parental Care in the Bony Fishes (L. S. Blumer), 54: 149-161
- Males are smaller than females, mammals in which (K. Ralls), 51: 245-276
- Mammalian aging, regulation of physiological changes during (C. E. Finch), 51: 49-83
- Mammals, evolution on southern continents, and continental drift (A. Keast), 46: 335-378
- Mammals in Which Females Are Larger than Males (K. Ralls), 51: 245-276
- Mammals (male), patterns of copulatory behavior in (D. A. Dewsbury), 47: 1-33
- Mammals, monogamy in (D. G. Kleiman), 52: 39-69
- Man's view of himself (uncertainty in interplay of biological and cultural evolution) (H. F. Blum), 53: 29-40
- Marchalonis, J. J. (with G. W. Warr), Specific Immune Recognition by Lymphocytes: An Evolutionary Approach, 53: 225-241
- Marmots and ground squirrels, hibernation and circannual rhythms of food consumption in (D. E. Davis), 51: 477-514
- Mass of supportive tissue, scaling of (J. F. Anderson, H. Rahn, and H. D. Prange), 54: 139-148
- Maximization, principle of, relation to kin selection and reciprocal altruism (S. R. Schulman) [Commentary], 53: 283-286
- Maynard Smith, J., Commentary: Group Selection, 51: 277-283
- (with M. Slatkin), Models of Coevolution, 54: 233-263
- McQuade, A. B., Origins of the Nucleate Organisms, 52: 249-262
- Mechanism for morphogenesis in epitheliomesenchymal organs (G. V. Goldin), 55: 251-265
- Mendel's Elder Friar and Teacher, Matthew Klácel (1808-1882) (V. Orel) [Commentary], 47: 435-436
- Mental retardation, lysosomes and (I. Hirsch), 47: 303-312
- Metabolism (carbon), related to net carbon dioxide assimilation by monocotyledons (C. C. Black, W. G. Campbell, T. M. Chen, and P. Dittrich), 48: 299-313
- Metacommunication in mammals, development of (M. Bekoff), 47: 412-434
- Metastasis, cancer invasion and (I. R. Hart and I. J. Fidler), 55: 121-142
- Michener, C. D. (with N. Lin), Evolution of Sociality in Insects, 47: 131-159
- Milestones and Rates of Growth in the Development of Biology (B. Glass), 54: 31-53
- Miller, E. J. (with M. V. Barrow and C. F. Simpson), Lathyrism: A Review, 49: 101-128
- Miller, J. G., Living Systems, Part I (The Nature of Living Systems), 48: 63-91; Part II (The Organism), 48: 92-276
- Mineral Nutrition and Related Phenomena in Bromeliaceae and Orchidaceae (D. H. Benzing), 48: 277-290
- Mode of action of L-canavanine, a structural analogue of L-arginine (G. A. Rosenthal), 52: 155-178
- Model (evolutionary) of territoriality in ungulates (N. Owen-Smith), 52: 1-38
- Model for assembly of subcellular structure, bacteriophage T4 morphogenesis as a (W. B. Wood), 55: 353-367
- Model (integrative) of environmental car-

- cinogenesis (J. E. Trosko and C.-C. Chang), 53: 115-141
- Model (molecular) for cell interactions (S. Roth), 48: 541-563
- Models of Coevolution (M. Slatkin and J. Maynard Smith), 54: 233-263
- Models of group selection, a critical review of (M. J. Wade), 53: 101-114
- Molecular Model for Cell Interactions (S. Roth), 48: 541-563
- Monocotyledon phylogeny, evolutionary significance of Family Pandanaceae in (B. C. Stone), 47: 34-45
- Monocotyledons (arborescent), transport problems in (M. H. Zimmerman), 48: 314-321
- Monocotyledons, branching in (P. B. Tomlinson), 48: 458-466
- Monocotyledons, control of growth and development in (J. B. Fisher), 48: 291-298
- Monocotyledons, fossil evidence on early evolution of (J. A. Doyle), 48: 399-413
- Monocotyledons, net carbon dioxide assimilation in (C. C. Black, W. H. Campbell, T. M. Chen, and P. Dittrich), 48: 299-313
- Monocotyledons, palms and the origin and evolution of (H. E. Moore, Jr., and N. W. Uhl), 48: 414-436
- Monocotyledons, the problem of leaf morphology and evolution in (D. R. Kaplan), 48: 437-457
- Monocotyledons: Their Evolution and Comparative Biology (Parts I-VIII), 48: 277-321; 399-566
- Monogamy in Mammals (D. G. Kleiman), 52: 39-69
- Moore, H. E., Jr., and N. W. Uhl, Palms and the Origin and Evolution of the Monocotyledons, 48: 414-436
- Moore, W. S., An Evaluation of Narrow Hybrid Zones in Vertebrates, 52: 263-278
- Moorman, M. (with D. Pierce and P. Cloud), Sporulation and Ultrastructure in a Late Proterozoic Cyanophyte: Some Implications for Taxonomy and Plant Phylogeny, 50: 131-150
- Morals, ethics and the law (fertilization of human eggs in vitro) (R. G. Edwards), 49: 3-26
- Morgan's omelet and Wilson's ostrich egg (A. Weinstein) [Commentary], 55: 43-55
- Morphogenesis in epithelio-mesenchymal organs, a mechanism for (G. V. Goldin), 55: 251-265
- Morphogenesis in *Hydra* (S. Shostak), 49: 287-310
- Morphology (leaf) and evolution in the monocotyledons (D. R. Kaplan), 48: 437-457
- Mouse (house), reproductive ecology of (F. H. Bronson), 54: 265-299
- Mycotrophic achlorophyllous angiosperms, phylogeny and ecology of (T. E. Furman and J. M. Trappe), 46: 219-225

## N

- Narrow hybrid zones in vertebrates, an evaluation of (W. S. Moore), 52: 263-278
- Nature, balance of, changing concepts (F. N. Egerton), 48: 322-350
- Nature of living systems (J. G. Miller), 48: 63-91
- Nest architecture of social wasps, adaptiveness of (R. L. Jeanne), 50: 267-287
- New journal of plant physiology, reflections on the birth of (F. C. Steward) [Commentary], 50: 289-291
- Newsome, A. E., An Ecological Comparison of the Two Arid-Zone Kangaroos of Australia, and Their Anomalous Prosperity since the Introduction of Ruminant Stock to Their Environment, 50: 389-424
- Non-repetitive (and repetitive) DNA sequences and a speculation on the origins of evolutionary novelty (R. J. Britten and E. H. Davidson), 46: 111-138
- Nossal, G. J. V. (with M. Feldmann), Cellular Basis of Antibody Production, 47: 269-302
- Notice, Offprints Available, 54: 231
- Nucleate organisms, origins of (A. B. McQuade), 52: 249-262
- Nutrition (mineral) and related phenomena in Bromeliaceae and Orchidaceae (D. H. Benzing), 48: 277-290

## O

- Omelet (Morgan's) and Wilson's ostrich egg (A. Weinstein) [Commentary], 55: 43-55
- On Scientific Progress and Its Limits (B. Glass) [Commentary], 54: 417-419
- On the Evolution and Adaptive Significance of

- Postnatal Growth Rates in the Terrestrial Vertebrates (T. J. Case), 53: 243-282
- On Territoriality in Ungulates and an Evolutionary Model (N. Owen-Smith), 52: 1-38
- Oppenheimer, J. M., Fifty Years of Fundulus, 54: 385-395
- , Reflections on Fifty Years of Publications on the History of General Biology and Special Embryology, 50: 373-387
- Optimal Strategy of Evolution (L. B. Slobodkin and A. Rapoport), 49: 181-200
- Optimal Foraging: A Selective Review of Theory and Tests (G. H. Pyke, H. R. Pulliam, and E. L. Charnov), 52: 137-154
- Orchidaceae and Bromeliaceae, mineral nutrition and related phenomena in (D. H. Benzing), 48: 277-290
- Orel, V., Commentary: Mendel's Elder Friar and Teacher, Matthew Klácel (1808-1882), 47: 435-436
- Organelle competition (intracellular), evolutionary consequences of (W. G. Eberhard), 55: 231-249
- Organism (J. G. Miller), 48: 92-276
- Organisms (nucleate), origins of (A. B. McQuade), 52: 249-262
- Organization (social) and life history patterns among grouse, evolution of (R. H. Wiley), 49: 201-227
- Organization, Transcription and Regulation in the Animal Genome (E. H. Davidson and R. J. Britten), 48: 565-613
- Organs (epithelio-mesenchymal), a mechanism for morphogenesis in (G. V. Goldin), 55: 251-265
- Origin and evolution of the monocotyledons, palms and (H. E. Moore, Jr., and N. W. Uhl), 48: 414-436
- Origin of feathers, evolutionary (P. J. Regal), 50: 35-66
- Origin of flight, *Archaeopteryx* and (J. H. Ostrom), 49: 27-47
- Origins of evolutionary novelty, repetitive and non-repetitive DNA sequences and (R. J. Britten and E. H. Davidson), 46: 111-138
- Origins of the Nucleate Organisms (A. B. McQuade), 52: 249-262
- Ostrich egg (Wilson's) and Morgan's omelet (A. Weinstein) [Commentary], 55: 43-55
- Ostrom, J. H., *Archaeopteryx* and the Origin of Flight, 49: 27-47
- Owen-Smith, N., On Territoriality in Ungulates and an Evolutionary Model, 52: 1-38
- P
- Palms and the Origin and Evolution of the Monocotyledons (H. E. Moore, Jr., and N. W. Uhl), 48: 414-436
- Pandanaceae, evolutionary status of, and its significance in monocotyledon phylogeny (B. C. Stone), 47: 34-45
- Parasitic castrators, similarity to parasitoids (A. M. Kuris), 49: 129-148
- Parasitoids (insect), host regulation by (S. B. Vinson and G. F. Iwantsch), 55: 143-165
- Parasitoids, similarity to parasitic castrators (A. M. Kuris), 49: 129-148
- Parental care (male) in the bony fishes (L. S. Blumer), 54: 149-161
- Parsons, P. A., The Comparative Evolutionary Biology of the Sibling Species, *Drosophila melanogaster* and *D. simulans*, 50: 151-169
- Pathways of Carbon Metabolism Related to Net Carbon Dioxide Assimilation by Monocotyledons (C. C. Black, W. H. Campbell, T. M. Chen, and P. Ditttrich), 48: 299-313
- Patterns (life history) among grouse, evolution of social organization and (R. H. Wiley), 49: 201-227
- Patterns of Copulatory Behavior in Male Mammals (D. A. Dewsbury), 47: 1-33
- Patterns of Faunal Evolution (S. Anderson), 49: 311-332
- Phylogeny and Ecology of Mycotrophic Achlorophyllous Angiosperms (T. E. Furman and J. M. Trappe), 46: 219-225
- Phylogeny (monocotyledon), evolutionary significance of Family Pandanaceae in (B. C. Stone), 47: 34-45
- Phylogeny (plant) and taxonomy, implications of sporulation and ultrastructure in a Late Proterozoic cyanophyte (P. Cloud, M. Moorman, and D. Pierce), 50: 131-150
- Physiological changes during mammalian aging, regulation of (C. E. Finch), 51: 49-83
- Physiology (plant), reflections on the birth of a new journal of (F. C. Steward) [Commentary], 50: 289-291
- Pierce, D. (with P. Cloud and M. Moorman), Sporulation and Ultrastructure in a Late

- Proterozoic Cyanophyte: Some Implications for Taxonomy and Plant Phylogeny, 50: 131-150
- Plant defense, role of trichomes in (D. A. Levin), 48: 3-15
- Plant phylogeny and taxonomy, implications of sporulation and ultrastructure in a Late Proterozoic cyanophyte (P. Cloud, M. Moorman, and D. Pierce), 50: 131-150
- Plant physiology, reflections on the birth of a new journal of (F. C. Steward) [Commentary], 50: 289-291
- Plants (flowering), cell recognition in (A. E. Clarke and R. B. Knox), 53: 3-28
- Plants (seed), major disjunctions in the geographic ranges of (R. F. Thorne), 47: 365-411
- Play in mammals, development of (M. Bekoff), 47: 412-434
- Pleasure, sensory (M. Cabanac), 54: 1-29
- Polychaetes, behavior in (S. M. Evans), 46: 379-405
- Postnatal growth rates in the terrestrial vertebrates, evolution and adaptive significance of (T. J. Case), 53: 243-282
- Prange, H. D. (with J. F. Anderson and H. Rahn), Scaling of Supportive Tissue Mass, 54: 139-148
- Primitive war, in relation to resource competition and human aggression (W. H. Durham), 51: 385-415
- Principle of maximization, relation to kin selection and reciprocal altruism (S. R. Schulman) [Commentary], 53: 283-286
- Problem of Leaf Morphology and Evolution in the Monocotyledons (D. R. Kaplan), 48: 437-457
- Problems (transport) in arborescent monocotyledons (M. H. Zimmermann), 48: 314-321
- Production of antibodies, cellular basis of (M. Feldmann and G. J. V. Nossal), 47: 269-302
- Progress (scientific) and its limits (B. Glass) [Commentary], 54: 417-419
- Prosperity (anomalous) of the two arid-zone kangaroos of Australia since the introduction of ruminant stock (A. E. Newsome), 50: 389-424
- Proteins (scaffolding) and the genetic control of virus shell assembly (J. King, R. Griffin-Shea, and M. T. Fuller), 55: 369-393
- Proterozoic (Late) cyanophyte, sporulation and ultrastructure in (P. Cloud, M. Moorman, and D. Pierce), 50: 131-150
- Publications on the history of general biology and special embryology, reflections on fifty years of (J. M. Oppenheimer), 50: 373-387
- Pulliam, H. R. (with E. L. Charnov and G. H. Pyke), Optimal Foraging: A Selective Review of Theory and Tests, 52: 137-154
- Pyke, G. H., H. R. Pulliam, and E. L. Charnov, Optimal Foraging: A Selective Review of Theory and Tests, 52: 137-154

## QR

- Rahn, H. (with H. D. Prange and J. F. Anderson), Scaling of Supportive Tissue Mass, 54: 139-148
- Ralls, K., Mammals in Which Females Are Larger than Males, 51: 245-276
- Rapoport, A. (with L. B. Slobodkin), An Optimal Strategy of Evolution, 49: 181-200
- Rates of growth and milestones in the development of biology (B. Glass), 54: 31-53
- Rates of growth (postnatal) in the terrestrial vertebrates, evolution and adaptive significance of (T. J. Case), 53: 243-282
- Rattner, J. B. (with B. A. Hamkalo), Folding Up Genes and Chromosomes, 55: 409-417
- Reciprocal altruism, kin selection, and the principle of maximization — a reply to Sahlin (S. R. Schulman) [Commentary], 53: 283-286
- Reciprocal altruism, the evolution of (R. L. Trivers), 46: 35-57
- Recognition (cell) in flowering plants (A. E. Clarke and R. B. Knox), 53: 3-28
- Recognition (specific immune) by lymphocytes, an evolutionary approach (G. W. Warr and J. J. Marchalonis), 53: 225-241
- Reconsideration of the Evolutionary Status of the Family Pandanaceae and Its Significance in Monocotyledon Phylogeny (B. C. Stone), 47: 34-45
- Reflections on Fifty Years of Publications in the History of General Biology and Special Embryology (J. M. Oppenheimer), 50: 373-387
- Reflections on the Birth of a New Journal of Plant Physiology (F. C. Steward) [Commentary], 50: 289-291
- Regal, P. J., The Evolutionary Origin of Feathers, 50: 35-66

- Regulation of Physiological Changes during Mammalian Aging (C. E. Finch), 51: 49-83
- Regulation (host) by insect parasitoids (S. B. Vinson and G. F. Iwantsch), 55: 143-165
- Regulation, organization, and transcription in the animal genome (E. H. Davidson and R. J. Britten), 48: 565-613
- Repetitive and Non-repetitive DNA Sequences and a Speculation on the Origins of Evolutionary Novelty (R. J. Britten and E. H. Davidson), 46: 111-138
- Replacement patterns and dental formulas in therians, a theory of the evolution of (A. C. Ziegler), 46: 226-249
- Reply to Sahlins (kin selection, reciprocal altruism, and the principle of maximization) (S. R. Schulman) [Commentary], 53: 283-286
- Reproductive Ecology of the House Mouse (F. H. Bronson), 54: 265-299
- Reptiles, sex determination in (J. J. Bull), 55: 3-21
- Research and life of Boris L. Astaurov (R. L. Berg), 54: 397-416
- Resource Competition and Human Aggression, Part I: A Review of Primitive War (W. H. Durham), 51: 385-415
- Retardation (mental), lysosomes and (I. Hirsch), 47: 303-312
- Review (critical) of the models of group selection (M. J. Wade), 53: 101-114
- Rhythms (circannual) of food consumption in marmots and ground squirrels, hibernation and (D. E. Davis), 51: 477-514
- Rice and wheat (semidwarf) in global food needs (D. S. Athwal), 46: 1-34
- Riedl, R., Systems-Analytical Approach to Macro-Evolutionary Phenomena, 52: 351-370
- RNA (transfer), folding of molecule (C. Guthrie), 55: 335-352
- Role of Trichomes in Plant Defense (D. A. Levin), 48: 3-15
- Rosenthal, G. A., The Biological Effects and Mode of Action of L-Canavanine, a Structural Analogue of L-Arginine, 52: 155-178
- Rosenzweig, M. L., Aspects of Biological Exploitation, 52: 371-380
- Rosinski, J., and W. G. Rosen, Chloroplast Development: Fine Structure and Chlorophyll Synthesis, 47: 160-191
- Rosen, W. G. (with J. Rosinski), Chloroplast Development: Fine Structure and Chlorophyll Synthesis, 47: 160-191
- Roth, S., A Molecular Model for Cell Interactions, 48: 541-563
- Ruminant stock, introduction to Australia and anomalous prosperity of the two arid-zone kangaroos (A. E. Newsome), 50: 389-424
- Rust fungi and their hosts, coevolution of (D. B. O. Savile), 46: 211-218

## S

- Sahlins, reply to (kin selection, reciprocal altruism, and the principle of maximization) (S. R. Schulman) [Commentary], 53: 283-286
- Savile, D. B. O., Coevolution of the Rust Fungi and Their Hosts, 46: 211-218
- Scaffolding Proteins and the Genetic Control of Virus Shell Assembly (J. King, R. Griffin-Shea, and M. T. Fuller), 55: 369-393
- Scaling of Supportive Tissue Mass (J. F. Anderson, H. Rahn, and H. D. Prange), 54: 139-148
- Schulman, S. R., Commentary: Kin Selection, Reciprocal Altruism, and the Principle of Maximization — A Reply to Sahlins, 53: 283-286
- Science (subjective) — Skinner and Dubos on survival (J. A. Woodcock), 48: 615-623
- Scientific progress and its limits (B. Glass) [Commentary], 54: 417-419
- Seed plants, major disjunctions in the geographic ranges of (R. F. Thorne), 47: 365-411
- Selection, group (J. Maynard Smith) [Commentary], 51: 277-283
- Selection (group), a critical review of the models of (M. J. Wade), 53: 101-114
- Selection (kin), evolution of social behavior by (M. J. West Eberhard), 50: 1-34
- Selection (kin), reciprocal altruism, and the principle of maximization — a reply to Sahlins (S. R. Schulman) [Commentary], 53: 283-286
- Selective review of theory and tests of optimal foraging (G. H. Pyke, H. R. Pulliam, and E. L. Charnov), 52: 137-154
- Semidwarf Rice and Wheat in Global Food Needs (D. S. Athwal), 46: 1-34
- Sensory Pleasure (M. Cabanac), 54: 1-29

- Sex Determination in Reptiles (J. J. Bull), 55: 3-21
- Shell assembly (virus), scaffolding proteins and the genetic control of (J. King, R. Griffin-Shea, and M. T. Fuller), 55: 369-393
- Shostak, S., Complexity of *Hydra*: Homeostasis, Morphogenesis, Controls, and Integration, 49: 287-310
- Sibling species, *Drosophila melanogaster* and *D. simulans*, comparative evolutionary biology of (P. A. Parsons), 50: 151-169
- Significance (adaptive) and evolution of post-natal growth rates in the terrestrial vertebrates (T. J. Case), 53: 243-282
- Silverman, M., Building Bacterial Flagella, 55: 395-408
- Similarity of parasitic castrators to parasitoids (trophic interactions) (A. M. Kuris), 49: 129-148
- Simpson, C. F. (with E. J. Miller and M. V. Barrow), Lathyrism: A Review, 49: 101-128
- Skinner and Dubos on survival (J. A. Woodcock) [Commentary], 48: 615-623
- Slatkin, M. (with R. B. Huey), Costs and Benefits of Lizard Thermoregulation, 51: 363-384
- Slatkin, M., and J. Maynard Smith, Models of Coevolution, 54: 233-263
- Slobodkin, L. B., and A. Rapoport, An Optimal Strategy of Evolution, 49: 181-200
- Smuts on Grasses — Some General Implications of the Incidence of Ustilaginales on the Genera of Gramineae (L. Watson), 47: 46-62
- Social behavior, evolution by kin selection (M. J. West Eberhard), 50: 1-34
- Social interaction, play, and metacommunication in mammals, development of (M. Bekoff), 47: 412-434
- Social organization and life history patterns among grouse, evolution of (R. H. Wiley), 49: 201-227
- Social wasp nest architecture, adaptiveness of (R. L. Jeanne), 50: 267-287
- Sociality in insects, evolution of (N. Lin and C. D. Michener), 47: 131-159
- Socially Facilitated Behavior (D. A. Clayton), 53: 373-392
- Society, genetics, intelligence and (J. R. G. Turner and B. Glass) [Commentary], 51: 85-88
- Some implications for taxonomy and plant phylogeny of sporulation and ultrastructure in a Late Proterozoic cyanophyte (P. Cloud, M. Moorman, and D. Pierce), 50: 131-150
- Southern continents, continental drift and the evolution of mammals (A. Keast), 46: 335-378
- Species (sibling) of *Drosophila (melanogaster and simulans)*, comparative evolutionary biology of (P. A. Parsons), 50: 151-169
- Specific Immune Recognition by Lymphocytes: An Evolutionary Approach (G. W. Warr and J. J. Marchalonis), 53: 225-241
- Speculation on the origins of evolutionary novelty, repetitive and non-repetitive DNA sequences and (R. J. Britten and E. H. Davidson), 46: 111-138
- Sporulation and Ultrastructure in a Late Proterozoic Cyanophyte: Some Implications for Taxonomy and Plant Phylogeny (P. Cloud, M. Moorman, and D. Pierce), 50: 131-150
- Squirrels (ground) and marmots, hibernation and circannual rhythms of food consumption in (D. E. Davis), 51: 477-514
- Status (evolutionary) of the Family Pandanaceae and its significance in monocotyledon phylogeny (B. C. Stone), 47: 34-45
- Stearns, S. C., Life-History Tactics: A Review of the Ideas, 51: 3-47
- Steward, F. C., Commentary: Reflections on the Birth of a New Journal of Plant Physiology, 50: 289-291
- Stone, B. C. A Reconsideration of the Evolutionary Status of the Family Pandanaceae and Its Significance in Monocotyledon Phylogeny, 47: 34-45
- Strategy (optimal) of evolution (L. B. Slobodkin and A. Rapoport), 49: 181-200
- Structure (subcellular), bacteriophage T4 morphogenesis as a model for assembly of (W. B. Wood), 55: 353-367
- Subcellular structure, bacteriophage T4 morphogenesis as a model for assembly of (W. B. Wood), 55: 353-367
- Subjective Science — Skinner and Dubos on Survival (J. A. Woodcock) [Commentary], 48: 615-623
- Supportive tissue mass, scaling of (J. F. Ander-



- son, H. Rahn, and H. D. Prange), 54: 139-148
- Survival, Skinner and Dubos on (J. A. Woodcock) [Commentary], 48: 615-623
- Synthesis and fine structure (chloroplast), development of (J. Rosinski and W. G. Rosen), 47: 160-191
- Systems-Analytical Approach to Macro-Evolutionary Phenomena (R. Riedl), 52: 351-370
- T**
- T4 bacteriophage morphogenesis as a model for assembly of subcellular structure (W. B. Wood), 55: 353-367
- Tactics (life-history), a review of the ideas (S. C. Stearns), 51: 3-47
- Taxonomy and plant phylogeny, implications of sporulation and ultrastructure in a Late Proterozoic cyanophyte (P. Cloud, M. Moorman, and D. Pierce), 50: 131-150
- Terrestrial vertebrates, evolution and adaptive significance of postnatal growth rates in (T. J. Case), 53: 243-282
- Territoriality in ungulates and an evolutionary model (N. Owen-Smith), 52: 1-38
- Tests and theory of optimal foraging, a selective review (G. H. Pyke, H. R. Pulliam, and E. L. Charnov), 52: 137-154
- Tetrapods and Continents (E. H. Colbert), 46: 250-269
- Theoretical Aspects of Cursorial Adaptations in Dinosaurs (W. P. Coombs, Jr.), 53: 393-418
- Theory and tests of optimal foraging, a selective review (G. H. Pyke, H. R. Pulliam, and E. L. Charnov), 52: 137-154
- Theory of Diversity-Stability Relationships in Ecology (D. Goodman), 50: 237-266
- Theory of the Evolution of Therian Dental Formulas and Replacement Patterns (A. C. Ziegler), 46: 226-249
- Therian dental formulas and replacement patterns, a theory of the evolution of (A. C. Ziegler), 46: 226-249
- Thermoregulation (lizard), costs and benefits of (R. B. Huey and M. Slatkin), 51: 363-384
- Thomson, K. S., The Adaptation and Evolution of Early Fishes, 46: 139-166
- Thorne, R. F., Major Disjunctions in the Geographic Ranges of Seed Plants, 47: 365-411
- Tissue mass (supportive), scaling of (J. F. Anderson, H. Rahn, and H. D. Prange), 54: 139-148
- Tomlinson, P. B., Branching in Monocotyledons, 48: 458-466
- Towards a Mechanism for Morphogenesis in Epithelio-mesenchymal Organs (G. V. Goldin), 55: 251-265
- Transcription, regulation, and organization in the animal genome (E. H. Davidson and R. J. Britten), 48: 565-613
- Transfer RNA, folding of molecule (C. Guthrie), 55: 335-352
- Transport Problems in Arborescent Monocotyledons (M. H. Zimmermann), 48: 314-321
- Trappe, J. M. (with T. E. Furman), Phylogeny and Ecology of Mycotrophic Achlorophyllous Angiosperms, 46: 219-225
- Trichomes in plant defense (D. A. Levin), 48: 3-15
- Trivers, R. L., The Evolution of Reciprocal Altruism, 46: 35-57
- Trophic Interactions: Similarity of Parasitic Castrators to Parasitoids (A. M. Kuris), 49: 129-148
- Trosko, J. E., and C.-C. Chang, Environmental Carcinogenesis: An Integrative Model, 53: 115-141
- Turner, J. R. G., and B. Glass, Commentary: Genetics, Intelligence, and Society, 51: 85-88
- Two cultures, ambition in (J. H. Gagnon) [Commentary], 46: 58-65
- U**
- Uhl, N. W. (with H. E. Moore, Jr.), Palms and the Origin and Evolution of the Monocotyledons, 48: 414-436
- Ultrastructure in a Late Proterozoic cyanophyte, sporulation and (P. Cloud, M. Moorman, and D. Pierce), 50: 131-150
- Uncertainty in Interplay of Biological and Cultural Evolution: Man's View of Himself (H. F. Blum) 53: 29-40
- Ungulates, territoriality in, an evolutionary model (N. Owen-Smith), 52: 1-38
- Unity and Diversity in Biochemistry (M. Levandowsky) [Commentary], 54: 55-60
- Ustilaginales on the genera of Gramineae, some general implications (L. Watson), 47: 46-62

## V

- Vernacular words in herpetology (The compleat dictionary of zoology, I) (R. B. Huey) [Commentary], 54: 301-307
- Vertebrates, an evaluation of narrow hybrid zones in (W. S. Moore), 52: 263-278
- Vertebrates (terrestrial), evolution and adaptive significance of postnatal growth rates in (T. J. Case), 53: 243-282
- Vinson, S. B., and G. F. Iwantsch, Host Regulation by Insect Parasitoids, 55: 143-165
- Virus shell assembly, scaffolding proteins and the generic control of (J. King, R. Griffin-Shea, and M. T. Fuller), 55: 369-393

## W

- Wade, M. J., A Critical Review of the Models of Group Selection, 53: 101-114
- War, primitive, in relation to resource competition and human aggression (W. H. Durham), 51: 385-415
- Warr, G. W., and J. J. Marchalonis, Specific Immune Recognition by Lymphocytes: An Evolutionary Approach, 53: 225-241
- Wasp (social) nest architecture, adaptiveness of (R. L. Jeanne), 50: 267-287
- Watson, L., Smuts on Grasses — Some General Implications of the Incidence of Ustilaginales on the Genera of Gramineae, 47: 46-62
- Weinstein, A., Commentary: Wilson's Ostrich Egg and Morgan's Omelet, 55: 43-55

- West Eberhard, M. J., The Evolution of Social Behavior by Kin Selection, 50: 1-34
- Wheat and rice (semidwarf) in global food needs (D. S. Athwal), 46: 1-34
- Wiley, R. H., Evolution of Social Organization and Life History Patterns among Grouse, 49: 201-227
- Wilson's Ostrich Egg and Morgan's Omelet (A. Weinstein) [Commentary], 55: 43-55
- Wood, W. B., Bacteriophage T4 Morphogenesis as a Model for Assembly of Subcellular Structure, 55: 353-367
- Woodcock, J., Commentary: Doomsday Revisited, 50: 425-428
- , Commentary: Subjective Science — Skinner and Dubos on Survival, 48: 615-623
- Words (vernacular) in herpetology (The compleat dictionary of zoology, I) (R. B. Huey) [Commentary], 54: 301-307

## XYZ

- Ziegler, A. C., Theory of the Evolution of The-rian Dental Formulas and Replacement Patterns, 46: 226-249
- Zimmerman, M. H., Transport Problems in Arborescent Monocotyledons, 48: 314-321
- Zones, narrow hybrid, in vertebrates, an evaluation of (W. S. Moore), 52: 263-278
- Zoology, compleat dictionary of (I: Vernacular words in herpetology) (R. B. Huey) [Commentary], 54: 301-307

